SYNONYMY OF AND REMARKS ON OLD-DESCRIBED AUSTRALIAN MOLLUSCA, WITH NOTES ON THEIR DISTRIBUTION.

BY JOHN BRAZIER, F.L.S., C.M.Z.S., &C.

In the year 1854 Mr. William Swainson, in the Proceedings of the Royal Society of Van Diemen's Land (Vol. iii. p. 38, pl. vi. figs. 1, 2), defined and described a new genus and species of *Trochidæ*, discovered by Dr. Milligan on the east coast of that island; he defined the genus as *Astele*, and he says that on a cursory glance it has every appearance of belonging to the beautiful genus *Calliostoma* (Treatise on Malacology, p. 351, 1840).

The genus may thus be defined from its shell :---

ASTELE, Swainson, 1854.

"Animal unknown. Shell perlaceous; pyramidical or trochiform; unarmed, body whorl beneath convex. Columella none. Umbilicus large, closed only by the terminal whorl of the spire. Aperture broader than high, the margin of both lips thin."

ASTELE SUBCARINATA, Swainson, 1854.

"Shell broader than high; whorls above scarcely convex; marked by 6-7 elevated, smooth, convex striæ, which leave a flattened margined rim at the top of each whorl; body whorl beneath marked with concentric grooves, which are decussated near the umbilicus."

"Colour pale fawn, or isabella, clouded with faint transverse waves of rufous."

"Margin of the body whorl slightly carinated; there is a depression between the margin and the second elevated striæ on the upper surface, the first, or that next the margin, being very slender. The striæ beneath assume the appearance of grooves, which are wider apart as they approach the umbilicus; and the

three more immediately adjoining are crossed by transverse striæ, which produces a granulated appearance somewhat similar to that of *Solarium perspectivum*."

"There are no longitudinal striæ, however slight, on the surface. The umbilicus is pure white, and the inner surface of the aperture reflects the striæ on the upper surface."

Nine years after its description by Swainson, Mr. Arthur Adams comes to the front with another new generic and specific name in the Proceedings of the Zoological Society of London, 1863, p. 506, as *Eutrochus*, with the specific name of *perspectivus*.

EUTROCHUS, A. Adams, 1863.

"Testa trochiformis, tenuis, perspective umbilicata; anfractibus planis, transversim liratis. Apertura subquadrata, intus margaritacea, labio rectiusculo, margine acuto, subreflexo, antice in dentem obtusum desinente."

"A form of *Trochida* most nearly resembling a *Ziziphinus*, with a perspective umbilicus similar to that of *Architectonica*."

EUTROCHUS PERSPECTIVUS, A. Adams, 1863.

"E. testa depresso-conoidea, late et profunde umbilicata, pallide carnicolore, fulvo sparsim maculata et flammulis fulvicantibus pieta; anfractibus 7, planis, transversim valde liratis, liris inæqualibus subdistantibus, ad suturas angulatis, anfractu ultimo ad periomphalum granuloso; apertura intus sulcata."

" Alt. 1 in., lat. 11 in.

"The shell is broader than high, rather thin, and of a pale yellowish flesh-colour, with fulvous blotches and flammules. The whorls are transversely ridged and angulate at the sutures, and the interior of the umbilicus is white. Mr. Cuming possesses but a single specimen from Tasmania."

Type in British Museum.

My esteemed friend Mr. H. A. Pilsbry could never have seen the Proc. Royal Soc. Van Diemen's Land, 1854, Vol. iii.; for if he had I am quite sure he would have given Swainson's genus and species credit, and not A. Adams' *Eutrochus*. The only mention of Swainson's *umbilicated* species of *Trochus* is by Mr. Pilsbry in Tryon's Manual of Conchology, Vol. x. p. 231, 1888; but then he is only quoting from Tenison-Woods (Proc. Royal Soc. Tasmania, p. 39, 1877).

There is no mention whatever of *Astele* in Tryon, (*Trochidae*, Vol. xi. 1889, by Mr. H. A. Pilsbry), the latest work out on the subject.

Pilsbry changes A. Adams' specific name from *perspectivus* to *Adamsi*, the former name being used by Koch also for an *Astele* = *Eutrochus*; he also says—"I hesitate to change the name of this the typical species of *Eutrochus*, but it is preoccupied by an undoubtedly congeneric species described years before."

I like to give honour to whom honour is due, and that is to Swainson; the synonymy will stand as below :---

1. ASTELE SUBCARINATA, Swainson, sp.

- 1854. Astele subcarinata, Swainson, Proc. Roy. Soc. of Van Diemen's Land,* Vol. iii. p. 36, pl. 6, figs. 1-2.
- 1863. Eutrochus perspectivus, A. Adams, Proc. Zool. Soc. p. 506.
- 1877. Astele subcarinatus, Tenison-Woods, Proc. Roy. Soc. Tasmania, p. 39.

1889. Calliostoma (Eutrochus) Adamsi, Pilsbry in Tryon's Manual of Conchology, Vol. xi. p. 402.

Hab.—East coast of Tasmania (Dr. Milligan); Tasmania (Cuming); Circular Head, North coast of Tasmania (Brazier); Rocky Cape, near Circular Head (Miss Mary Lodder); Port Sorell, North coast of Tasmania (Mrs. Dumbelton).

Of this very rare shell I know of only two specimens in this country, one in the collection of Dr. J. C. Cox and one that has been in my own this past thirty years. Tenison-Woods remarks that only very few specimens have ever been found.

^{*} Name of Van Diemen's Land altered to Tasmania on Address of Legislative Council, 1854

The measurements of the specimen I now figure are: greatest height 34; least, 28; greatest breadth, 47; least, 40; aperture wide, 17; height, 12 millimetres.



(C. H. del.)

The other species of Australian Astele are scitula, A. Adams, originally described as coming from New Zealand on the authority of Cuming; the original specimens were, however, collected by the late Mr. Fred. Strange in Port Jackson : Astele multigrana, Dunker, from St. Vincent's Gulf, South Australia; Astele subgranulata, Dunker, Bass Straits; and Astele Lessonceana, Tapparone-Canefri, New Zealand (Mus. of Turin).

2. TURBO GRUNERI, Philippi, sp.

- 1846. Turbo Gruneri, Philippi, Zeitschrift für Malakozoologie, p. 98, No. 6; Philippi in Martini and Chemnitz, Conch. Cab. 2nd edition, p. 52, pl. 12, fig. 7.
- 1848. Turbo circularis, Reeve, Conch. Icon. Vol. iv. pl. 10, sp. 46.
- 1854. Senectus circularis, Reeve; H. and A. Adams, Recent Mollusca, Vol. i. p. 392.
- 1865. Senectus circularis, Reeve; Angas, Marine Molluscan Fauna of the Province of South Australia, Proc. Zool. Soc. p. 177.
- 1873. Turbo circularis, Reeve; Fischer in Kiener, Coq. Vivantes, p. 99, pl. 42, fig. 1.
- 1873. Turbo (Senectus) circularis, Reeve; Paetel, Catalog der Conch.-Sammlung. p. 71.

- 1877. Turbo (Senectus) circularis, Reeve; Tenison-Woods, Papers and Proc. Royal Soc. Tasmania, p. 38.
- 1885. Turbo circularis, Reeve; Sowerby, Thes. Conch. Vol. v. p. 203, sp. 42, pl. 4; Thes. pl. 496, fig. 37.
- 1886. Turbo Gruneri, Philippi; Brazier, Transactions of the Royal Society of South Australia, Vol. ix. p. 125.
- 1888. Turbo circularis, Reeve; Pilsbry in Tryon's Manual of Conchology, Vol. x. p. 214, pl. 41, fig. 24.

Hab.—Adelaide, New Holland (Gruner, Philippi); "____"? (Reeve); St. Vincent's Gulf, South Australia (G. F. Angas); Holdfast Bay (W. T. Bednall, Tate); King's Island, Bass Strait (Tenison-Woods); Swan River, Australia (Sowerby).

I pointed out in the Transactions of the Royal Society of South Australia in 1886 that Turbo Gruneri, Philippi, had two years' priority over Reeve's Turbo circularis ; but in 1888 Mr. Pilsbry in Tryon's Manual informs the conchological world that there is some uncertainty about which of the above names has priority for this species. "The volume of the Conchylien Cabinet in which Philippi's description occurs bears date 1846; but it was not completed until after the publication of Reeve's monograph of Turbo in the Iconica. Philippi begins to cite Reeve in his synonymy on p. 69 of his work, so that from that point onward we may be certain that his work appeared subsequent to Reeve's, but whether his description of T. Gruneri (p. 52 of the Conch. Cab.) was actually published before Reeve's description I am unable to decide. Brazier (Trans. Roy. Soc. S. Australia, ix. p. 125) gives priority to Gruneri, 'Philippi in Zeitschrift für Malak., p. 98.' The species was never published in the Zeitschrift."

It seems very strange that Mr. Pilsbry should make the above charge, when he quotes *Turbo lamellosus*, Philippi, in his index to *Turbo* (Vol. x. of Tryon's Manual), that species being described in the Zeitschrift für Malakozoologie, p. 98, No. 7, 1846, just under *Turbo Gruneri*, Philippi.

I may mention that *Turbo lamellosus*, Philippi, is not the *Turbo lamellosus*, Broderip, which is the *Turbo stamineus*, Martyn.

Philippi changed his name to *Turbo foliaceus* in the Conch Cab. 2nd edition, p. 41, pl. 11, figs. 1-2, 1846, (not figures 2 and 3 as quoted in Tryon).

3. TURBO (MARMOROSTOMA) UNDULATUS, Martyn.

- 1784. Limax undulatus, Martyn, Universal Conchologist, Vol. i. fig. 29.
- 1786. Limax anguis, Martyn, Universal Conchologist, Vol. ii. fig. 70.
- 1788. Turbo undulatus, Chemnitz, Conch. Cab. Vol. x. pp. 294-296, pl. 169, figs. 1640, 1641.
- 1846. Turbo anguis, Martyn; Philippi in Conch. Cab. p. 70, No. 34.
- 1848. Turbo undulatus, Chemnitz; Reeve, Conch. Icon. Vol. iv. pl. 1, fig. 3, a, b.
- 1867. Lunella undulata, Chemnitz; Angas, List of Marine Mollusca found in Port Jackson Harbour, Proc. Zool. Soc. p. 213, No. 171.
- 1888. Turbo undulatus, Martyn; Pilsbry in Tryon's Manual of Conchology, Vol. x. p. 216, pl. 42, fig. 40.
- 1888. Turbo anguis, Martyn; Pilsbry in Tryon's Manual of Conchology, Vol. x. Index, p. 272, = Turbo porphyrites, Martyn.

Hab.—New Holland, New South Wales (Martyn); Port Jackson, Newcastle, Port Stephens, Bellinger River, and the whole south coast of New South Wales; Tasmania; Victoria; South Australia.

When this species was first figured by Martyn, the large specimens he called *Limax undulatus*, from their peculiar undulating markings. The small specimens from New South Wales he called *Limax anguis*. This small variety is the most common form found at Botany Bay, where, no doubt, Banks and Solander collected the specimen figured by Martyn; it is also the common form found in Port Jackson near the Heads. Philippi in the Conch. Cab. calls this small form, variety sulcata of undulatus. It is evidently an oversight on the part of Mr. Pilsbry when he makes *anguis*, Martyn, = T. *porphyrites*, Martyn; he might just as well say that T. *undulatus*, Martyn, = T. *porphyrites*; but the specific differences are very widely distinct, and the species is not found in New Zealand as he quotes it.

"Dr. Solander in the Catalogue of the Portland Museum, 1784: No. 408—A large and fine *Turbo undulatus* from New Holland, extremely scarce; No. 3828—A large and very fine *Turbo undulatus*, or waved Emerald *Turbo*, extremely scarce, from Van Diemen's Land, New Holland."

4. MUREX (CHICOREUS) AUSTRALIS, Quoy and Gaimard.

- 1811. Triplex ponderosa, Perry, Conchology, or the Natural History of Shells, pl. 6, fig. 1.
- 1832. Murex australis, Quoy et Gaimard, Voyage de "l'Astrolabe," Tome ii. p. 536.
- 1840. Murex palmiferus, Sowerby, Proc. Zool. Soc. p. 142; Conchological Illustrations, species 43, fig. 104.
- 1845. Murex palmiferus, Reeve, Conch. Icon. Vol. iii. pl. 4, fig. 20.
- 1858. Murex (Chicoreus) palmiferus, H. and A. Adams, Genera of Recent Mollusca, Vol. i. part 3, p. 72.
- 1867. Murex (Chicoreus) palmiferus, Angas, Proc. Zool. Soc. p. 186, No. 6.
- 1875. Murex (Chichoreus) palmiferus, Tapparone-Canefri, Muricidi del Mar Rosso, Annali del Museo Civico di Storia Naturale di Genova, Vol. vii. p. 580.
- 1876. Murex palmiferus, Kobelt, Die Muriciden des rothen Meeres, Jahrb. d. deutsch. Malak. Gesellsch. Bd. iii. p. 42, No. 14.
- 1877. Murex (Chicoreus) palmiferus, Kobelt, Catalog der Gattung Murex in Jahrb. d. deutsch. Malak. Gesellsch. Bd. iv. p. 150, No. 55.

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- 1879. Murex palmiferus, Sowerby, Thes. Conch. Vol. iv. p. 18, No. 84, pl. 4, Murex, fig. 41.
- 1880. Murex (Tribulus) australis, Tryon, Manual of Conchology, Vol. ii. p. 83.
- 1880. Murex (Chicoreus) palmiferus, Tryon, Manual of Conchology, Vol. ii. p. 90, pl. 14, fig. 146 ; Tapparone-Canefri, La Fauna Malacologique d. l'ile Maurice, Annales de la Société Malacologique de Belgique, Tome xv. (Deuxième Série, Tome v.), p. 10.
- 1882. Murex (Chicoreus) australis, Poirier, Revision des Murex du Muséum, Nouvelles Archives du Muséum D'Histoire Naturelle, Deuxième Série, Tome v. p. 32, No. 4.
- 1886. Murex (Chicoreus) palmiferus, Watson, Report on the Gasteropoda, Voyage of H.M.S. "Challenger," Zoology, Vol. xv. p. 155.
- 1889. Murex palmiferus, Sowerby; Whitelegge, List of the Marine and Fresh-Water Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society of New South Wales, Vol. xxiii. p. 246, No. 208.

Hab.—Port Western, New Holland (Quoy et Gaimard, 1829); Sydney (Dutailly); New Holland (M. J. Verreaux, 1846); New Caledonia (M. Deshayes, 1879); Red Sea (Soverby, 1840); North Australia (Reeve, 1845); between Ball's Head and Goat Island, 18 fathoms, bottom broken shells, stones, and gravel; Point Piper, Middle Harbour, Watson's Bay, under stones at low water, spring tides; Cape Solander, South Head, and Cape Banks, North Head, of Botany Bay; South Head of Crookhaven River, Shoal, haven, found under stones low water, springs; Montague Roads-Jervis Bay, near the rocks in 5 fathoms; Nelson Head and Bay, Port Stephens, New South Wales, under stones low water, spring tides (J. Brazier, 1854, 1893); Woolloomooloo Bay (G. F. Angas); Neutral Bay, Port Jackson (T. Whitelegge); Yeppoon, Keppell Bay, Queensland (George L. Pilcher, 1887); Largs Bay, South Australia (Arnold U. Henn, 1891). I have not seen this species further south of Sydney than Jervis Bay, where I dredged specimens on October 31, 1874. The specimens said to be obtained by Quoy and Gaimard at Port Western, New Holland (now Victoria), may have been dredged by them. I had not seen any species like it from Southern Australia until quite recently, when two specimens were obtained from shell débris by my friend Mr. Arnold U. Henn at Largs Bay, South Australia, in November, 1891.

I quote Mons. M. J. Poirier, from the Nouvelles Archives du Muséum D'Histoire Naturelle, p. 65 :-- "This species, of Quoy and Gaimard, misunderstood by all authors, has nearly the same geographical range as M. corrugatus, Sowerby, with which, besides, it has many analogies. It has been remarked on the northern coasts of Australia and in the Red Sea. It is represented by twelve individuals coming from Port Western (the types of Quoy and Gaimard, 1829), from Sydney (Coll. Dutailly), from New Holland (M. J. Verreaux, 1846), and from New Caledonia (M. Deshaves, 1874). The M. australis, Quoy and G., not figured in the atlas of the Voyage of the 'Astrolabe,' has been lost in forgetfulness by the various writers who have dealt with the genus Murex. Tryon alone admits it, but without recognising its affinities, and he places it among the group of Tribulus. An examination of the types preserved in the collection of the Museum* has shown me that this species is no other than that described by Sowerby under the name of M. palmiferus. This denomination being the latest ought then to pass into the synonymy."

The Rev. Boog Watson, in his Report on the Gasteropoda of H.M.S. "Challenger," Zoology, Vol. xv. p. 155, appears to have followed Mr. Tryon in lumping *M. palmiferus*, Sowerby, = australis, Quoy and G., with three distinct and well-known species, namely, *Murex corrugatus*, Sowerby, *Murex multifrondosus*, Sowerby, and *Murex dilectus*, A. Adams.

The word *Chicoreus* is spelt in three different ways by three authors, namely *Chicoreus*, Montfort, 1810; *Chichoreus*, Tapparone-Canefri, 1874; *Cichoreus*, E. v. Martens, 1880.

^{*} Museum of the Jardin des Plantes, Paris.

5. MUREX (PHYLLONOTUS) UMBILICATUS, Tenison-Woods.

- 1853. Murex scalaris, A. Adams (non Brocchi), Proc. Zool. Soc. London, p. 71.
- 1865. Murex scalaris, Angas (non Brocchi), Marine Molluscan Fauna of South Australia, Proc. Zool. Soc. London, p. 157, No. 5.
- 1875. Trophon umbilicatus, Tenison-Woods, Papers and Proceedings of the Royal Society of Tasmania, p. 135, 1875, 1876.
- 1876. Murex (Muricidea) scalaris, Brazier (non Brocchi), "Che vert" Expedition, Shells, Proc. Linn. Soc. New South Wales, Vol. i. p. 172, No. 13, 1875, 1877.
- 1877. Trophon umbilicatus, Tenison-Woods, Census, with brief descriptions of the Marine Shells of Tasmania and the adjacent islands; Papers and Proceedings of the Royal Society of Tasmania, p. 26, 1877, 1878.
- 1877. Murex (Ocinebra) scalaris, Kobelt (non Brocchi), Jahrb. d. deutsch. Malak. Gesellsch. Bd. iv. p. 248, No. 227.
- 1880. Murex (Phyllonotus) Angasi, Tryon (non Crosse), Manual of Conchology, Vol. ii. p. 109.
- 1884. Murex (Phyllonotus) octogonus, Bednall (non Quoy and Gaimard), Transactions and Proceedings and Reports of the Royal Society of South Australia, Vol. viii. p. 64, 1884, 1885 (issued May, 1886).

Hab.—Moreton Bay, Queensland (Mr. F. Strange); St. Vincent's Gulf, South Australia, "dredged along with horny zoophytes and nullipores at a depth of seven or eight fathoms" (Angas, Tate, Bednall); Darnley Island, Torres Straits, 30 fathoms, sandy bottom (J. Brazier, "Chevert" Expedition, 1875); Barran Island, Bass' Strait (Mr. W. Legrand, 1873); Giles' Point, near Coobowie, St. Vincent's Gulf, off the rocks below low water mark (Mr. E. H. Matthews, 1891); Trowbridge Island, St. Vincent's Gulf, off the beach, also dredged in life from 4 to 10 fathoms; fair specimens from Hardwicke Bay, Spencer's Gulf (Mr. E. II.Matthews, 1892); east coast of Tasmania (Mr. W. Legrand); north coast of Tasmania from Port Sorell to a few miles west of the River Leven, specimens generally very much beach-worn (Miss Mary Lodder, 1892).

Some years ago I sent home a specimen of this shell that I had received from Mr. Bednall to my respected friend Mr. Henry Adams to know if it was identical with his brother's species *Murex scalaris*. I had already made it out as such from the description given in the Proceedings of the Zoological Societyof London, 1853, p. 71. He duly returned the specimen and stated that it was "identical with the *Murex scalaris*, A. Adams (not of Brocchi), in Museum Cuming; the *Murex scalaris* of my brother requires a new name, and if you are working up the genus at any time pray give it a new name."

In 1873 Mr. W. Legrand sent me a beach-worn specimen with the line worn off, and on that account I laid it aside and did not take any further notice of it; and on my leaving Sydney for New Guinea in 1875 the Rev. J. E. Tenison-Woods described it in a paper read before the Royal Society of Tasmania, November, 1875, from specimens collected by Mr. Legrand. There is not the slightest connection between *Murex octogonus*, Quoy and G., and *Murex umbilicatus*, Tenison-Woods; the former is a large shell with very fine line between the longitudinal linate ribs, the latter is a much thicker and smaller shell with a large umbilicus margined with rounded imbricated scales.

Swainson in 1835 defined a subgenus of the Muricidæ under the name of *Centronotus*, but he re-named it *Phyllonotus* and *Muricanthus* (1840); the former name *Centronotus* had been previously given to a genus of fishes in 1801 by Bloch, Schn.; Lacepède, 1802.

6. MUREX (OCINEBRA) BRAZIERI, Angas.

1877. Murex Brazieri, Angas, Proc. Zool. Soc. p. 171, pl. 26, fig. 3; p. 179, No. 12.

- 1879. Murex Brazieri, Sowerby, Thes. Conch. Vol. iv. p. 42, species 200, Murex, pl. 33, fig. 226 (enlarged).
- 1880. Murex (Ocinebra) Brazieri, Tryon, Manual of Conchology, Vol. ii. p. 132, pl. 30, fig. 289 (very bad).
- 1882. Murex (Muricidea) Brazieri, Poirier, Révision des Murex du Muséum Nouvelles Archives du Museum d'Histoire Naturelle, Deuxième Série, Tome v. p. 104, No. 208.
- 1884. Trophon tumidus, Petterd, Journal of Conchology (England), Vol. iv. part 5, p. 141, No. 26.
- 1889. Murex Brazieri, Whitelegge, List of the Marine and Fresh-Water Invertebrate Fauna of Port Jackson and Neighbourhood, Journal and Proceedings of the Royal Society, New South Wales, Vol. xxiii. p. 246, No. 209.
- 1889. Murex Brazieri, Angas; Brazier, Journal of Conchology, (England), Vol. vi. part 2, p. 66.

Hab.—Dredged outside Port Jackson Heads in 20 fathoms (J. Brazier, 1873); off the Bottle and Glass Rocks, Vaucluse, Port Jackson, 8 fathoms, bottom gravel, broken shells, and fine sand (1874); Middle Harbour, found in shell-sand thrown up after south-east gale; South Australia (W. T. Bednall); northwest coast of Tasmania (Miss Mary Lodder); north side of Long Bay, near Sydney, in shell-sand (J. Brazier, July 24, 1886).

This species was sent to me by Mr. Bednall as the young of *Murex pumilus*, A. Adams, the latter species not being found in South Australia, but in China and Darros Island, Amirantes, in 22 fathoms.

The shell known in South Australia as *Murex pumilus*, A. Adams, by Mr. Angas and others, is a new species which I have named *Murex polypleurus*.

Through the kindness of Miss Mary Lodder, of Ulverstone, North Tasmania, in sending for my inspection the type specimen of Mr. Petterd's *Trophon tumidus*, I find that, after comparing it with numerous specimens of *Murex Brazieri*, Angas, they prove to be one and the same species. 7. HELCIONSISCUS TRAMOSERICA, Martyn.

- 1784. Patella tramoserica, Martyn, Universal Conchologist, Vol. i. pl. 16.
- 1795. Patella tranoserica, Martyn; Chemnitz, Conch. Cab. Vol. xi, p. 179, pl. 197, figs. 1912, 1913.
- 1836. Patella tramoserica, Chemnitz; Deshayes in Lamarck Anim. sans Vert. Vol vii. p. 542, No. 47.
- 1852. Patella tramoserica, Chemnitz; Gould, United States Exploring Expedition, Vol. xii. Mollusca and Shells, p. 343.
- 1854. Patella tramoserica, Martyn; Reeve, Conch. Icon. Vol. viii. pl. 13, fig. 27, a, b, c.

1873. Patella tramoserica, Martyn; E. v. Martens, Critical List of the Mollusca of New Zealand, contained in European Collections, p. 35.

- 1877. Patella tramoserica, Martyn; Tenison-Woods, Census, with brief Descriptions of the Marine Shells of Tasmania, Proc. Royal Soc. Tasmania, p. 45.
- 1880. Patella tramoserica, Martyn; Hutton, Manual of New Zealand Mollusca, p. 109.
- 1884. Patella tramoserica, Hutton, Proc. Linn. Soc. New South Wales, Vol. ix. p. 377.
- 1891, 1892. Helcionsiscus tramoserica, Pilsbry in Tryon's Manual of Conchology, Vol. xiii. p. 142, pl. 70, figs. 49, 50, 51, 52.

Hab.—New South Wales (Chemnitz, from Spengler's Coll.); Wellington, New Zealand (Hutton).

For this common species when first figured by Martyn in 1784 he gave the locality "north-west coast of America"; Chemnitz in 1795 was the first to give the correct locality, New South Wales, from Spengler's collection; it was also known as the Orange-striped Limpet from the South Sea by the elder English conchologists; Deshayes in Lamarck in 1836 gives Peru and

Chili; Dr. Gould in United States Exploring Expedition, 1852, gives New Zealand, and states that the "localities hitherto given, Peru and Chili, are probably erroneous"; Dr. E. v. Martens in 1873 says that "Gould corroborates Martyn's statement that it is found also in New Zealand"; Martyn never gave New Zealand or New South Wales, as I have previously said ; Professor Hutton in 1880 quotes New Zealand (Martyn and Gould), common in Australia, and this is taken from Martens' Critical List of New Zealand Mollusca, and again in 1884 he gives Wellington, New Zealand, for it, and quotes Patella antipodum, E. A. Smith, as being the same; not having seen Mr. Smith's species, I will not at present lump it with tramoserica. Mr. Pilsbry in Tryon's Manual, Vol. xiii. p. 142, 1891, 1892, makes tramoserica and antipodum one species ; the figure of the latter in the Zoology of the Voyage of H.M.S. Erebus and Terror, Mollusca, p. 4, pl. 1, fig. 25, is very much like some of the many varieties of tramoserica. and I doubt very much if Smith's species was ever found in New Zealand. Dieffenbach and others have made very grave errors in their localities of Australian and New Zealand Mollusca; even authors in some of the recent manuals and monographs quote strictly Australian species from New Zealand and New Ireland ; some of them evidently take New Ireland as being near Australia or a part of New Zealand.

To sum up *Helcionsiscus tramoserica* is purely an Australian species there is not the least doubt, it having been found in Tasmania, South Australia, Victoria, the whole coast line of New South Wales, and into Moreton Bay, Queensland; and its varieties are legion, and appear to have escaped the species-maker of the Cuming school.